Monthly Progress Report

Submitted to: Mr. Frank Battaglia, Project Manager
USEPA Region I
Waste Management Building
90 Canal Street
Boston, MA 02114

Submitted by: Dr. Barry Berdahl, C.H.M.M.
Project Coordinator
CIBA-GEIGY Corporation
Toms River Site
Route 37 West
Toms River, NJ 08754

Pursuant to: RCRA I-88-1088

Facility Site: Cranston, RI

Period Covered: October 1994 (24 September 1994 – 28 October 1994)*

Date Submitted: 10 November 1994

1.0 SUMMARY

This is the fifty-second monthly progress report. Five significant events occurred this month.

Phase II Investigation. Validation, reduction, and management of the Phase II data continued.

Project Management. Work toward completing the RFI/CMS investigations continued. During this period, the CIBA-GEIGY Project Coordinator was changed. The new Project Coordinator is Dr. Barry Berdahl; the alternate Project Coordinator is Mr. Michael Goodman.

Stabilization Investigation. Planning for stabilization implementation continued. The USEPA approved the stabilization schedule in Volume 1 of the Final Stabilization Design Documents (FSDD) and commented on selected sections of the FSDD. On 9/30/94, personnel from CIBA-GEIGY and Woodward-Clyde Consultants (WCC) met to discuss different process alternatives for the groundwater pretreatment system. On 10/3/94 a teleconference was held with personnel from the USEPA, CIBA-GEIGY, and WCC at which USEPA clarified selected comments on the FSDD. CIBA-GEIGY and WCC proposed submitting a letter to respond to USEPA's comments (A through D). CIBA-GEIGY proposed modifying the groundwater pretreatment system, and indicated that they would submit a revised functional description for the proposed modified pretreatment process; the response letter and revised functional description were submitted to the USEPA on 10/28/94. In summary, the groundwater pretreatment system will consist of liquid phase activated carbon without metals pretreatment. Additional meetings were held (on 10/12/94, 10/17/94, and 10/25/94) between CIBA-GEIGY and WCC to refine the redesigned process options for the groundwater pretreatment system. On 10/17/94 CIBA-GEIGY sent a letter (Attachment A) to the Cranston POTW outlining the changes proposed to the groundwater pretreatment system. On 10/27/94 personnel from CIBA-GEIGY and WCC visited the facility to evaluate site conditions for installation of the revised groundwater pretreatment system.

*As agreed, the reporting period will be monthly through the fourth Friday of the month.

Hydrological Investigation. Stage height measurements of the river continued. Processing river stage data from the automatic recorders (transducers) continued.

Water Level Monitoring. Monthly groundwater level monitoring continued. Processing groundwater level data from the automatic recorders (transducers) continued.

2.0 TASKS AND ACTIVITIES COMPLETED

The sampling and other activities (subtasks) that were completed are reported here.

2.1 Sampling Activities Completed

No sampling activities were conducted during this reporting period.

2.2 Other Activities Completed

The other activities (subtasks) completed during this reporting period were described in Section 1.0.

3.0 JEOPARDY TASKS (scheduled tasks not completed)

No tasks were in jeopardy as of 28 October 1994.

4.0 OTHER TASKS UNDERWAY (and on schedule)

The tasks that were underway (and on schedule as of 28 October 1994) were described in Section 1.0.

5.0 DATA OBTAINED

Groundwater level data have been obtained but have not yet been peer reviewed. Continuous groundwater level data from the automatic recorders (transducers) were downloaded but have not yet been processed. Phase II sampling data will be reported to the USEPA after validation is completed and the data have been moved in the project data base from QC2 (validated data) to QC3 (final data).

6.0 PROBLEM AREAS

No resolved, new, potential (i.e., anticipated or possible), nor outstanding (i.e., still unresolved) problem areas are reported here.

7.0 SCHEDULE OF TASKS (next two months)

The projected schedule is provided here. It covers the tasks to be performed in the next two months (November and December 1994), along with other comments or considerations.

Target Date	Task#	Task	Comments/Considerations
ongoing	—	Stabilization	
9/15/95	—	Phase II Investigation	
ongoing	9	Project Management	
ongoing	10	Data Management	
ongoing	11	Project Administration	
ongoing	12	Quality Assurance	
ongoing	13	Health & Safety Assurance	

8.0 CHANGES IN WORK PLAN

No changes were made to the Work Plan during this reporting period; changes proposed to the FSDD are outlined in Attachment A.

9.0 OTHER COMMENTS

The plans going forward into November and December include:

- moving forward with stabilization, and
- moving forward with document preparation.

ATTACHMENT A

Letter from CIBA-GEIGY to the Cranston POTW Outlining Proposed Modifications to the Groundwater Pretreatment System

CIBA-GEIGY Facility
Cranston, Rhode Island

Toms River Site

Ciba-Geigy Corporation
P.O. Box 71
Toms River, NJ 08754
Telephone 908 914 2500

October 17, 1994

Mr. Alfred Tutela, P.E.
Tutela Engineering Associates, Inc.
P.O. Box 28066
Providence, Rhode Island 2908

RE: INDUSTRIAL WASTEWATER DISCHARGE APPLICATION
FORMER CIBA-GEIGY FACILITY (PLOT NO.4, LOT NO. 1102)
180 MILL STREET, CRANSTON, RI

Dear Mr. Tutela:

On September 16, 1994, Ciba submitted an application to discharge to the Cranston POTW, along with the detailed design drawings. We understand this application is being reviewed for administrative completeness prior to technical evaluation.

As part of our on-going quality process, Ciba has been reviewing the pretratment process design (Drawings No. M1A & B and M2-7), that accompanied that application, with the intent of simplifying operation and increasing reliability, as follows:

- **The Two Equalization Tanks** would be replaced with a phase separator and a smaller equalization tank.

- **The Air Oxidation/pH system, sludge holding tank, and filter press** would be eliminated entirely and a sequesting agent added to retain iron in solution. The iron discharge would be 27.31 ppm (26.26 lb/day) at the average discharge rate of 80 GPM and 61.45 ppm (58.97 lbs/day) at the maximum design rate of 180 GPM. We do not believe that the actual rate would be too far from 80 GPM.

- **The stripper or the aqueous activated carbon** would be used to remove volatiles, but not both. The level of treatment for either system would be well below the TTO limit of 2.13 ppm.

- **An on-line organic monitor**, measuring TOC , would be added and remotely monitored at our regional Toms River, NJ Site. It would alarm and shut down the system at the equivalent of 1ppm TTO.

We have enclosed a draft revision of Drawing M1A-Process Flow-Diagram Groundwater Pretreatment System, Alternative Design along with the original Drawing M1A submitted to you. Since the iron discharge would exceed the local ordinance limit of 2 ppm, the POTW must approve this exception. Iron is a convention, non-toxic pollutant subject to the POTW's discretion. Ciba believes that an average discharge of 25 lb/day of iron would have no significant impact on the POTW's sludge production. In addition, we would be willing to met any other reasonable considerations, including a surcharge rate, if permitted to discharge iron at higher levels.

We would like to meet with you and the POTW to discuss this issue as soon as possible, so the detailed design drawings can be revised and resubmitted. If there are any questions, you can reach me at (908)914-2715.

Very truly your,

Barry J. Berdahl, Ph.D., C.H.M.M
Regional Compliance Manager

cc: J. Corrado, WWC w/o

wp51\DISCAPPL.CRN